# PaperTape (Traning Period: PBI- 2nd Report)

*by*

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## Introduction

As an intern at PaperTape, I have been working on the Hiccup app, which is an AI-driven solution that nudges users to make healthier food choices and helps them save money by controlling their spending habits. In my first two reports, I discussed my training period and initial tasks, which involved minor UI/UX changes, learning about the app's architecture and transfer learning, classifying images into categories, etc. In this report, I will discuss my progress over the last few weeks, including my long-term project and contributions to the Hiccup app.

## Present Investigation

I was told to learn about neural networks, primarily on how to quickly train and use them for the uses of the company’s projects. A large part of the time was spent exploring various ways/websites/libraries I could use to implement simple ideas quickly.

After completing my initial tasks, I was given a long-term project to develop a feature for the app that would allow users to receive personalized dish recommendations based on their dietary preferences and restrictions. To accomplish this, I needed to first create a dataset of recipes and associated nutritional information. I researched different sources for this data and ultimately settled on using publicly available datasets from reputable sources such as the USDA.

Next, I have to use transfer learning to fine-tune a pre-trained deep-learning model for recipe classification into categories such as vegan, vegetarian, gluten-free, etc.

## Results and Discussions

I was told to learn about neural networks, primarily on how to quickly train and use them for the uses of the company’s projects. A large part of the time was spent exploring various ways/websites/libraries I could use to implement simple ideas quickly. Fastai, HuggingFaces, and Github were great resources I found which could help really fasten the entire process. But I still need to keep exploring as new resources are coming up very rapidly and could help me significantly in the process.

## Conclusions

In conclusion, my experience as an intern at PaperTape has been a valuable learning opportunity, and I am proud of the contributions I have made to the development of the Hiccup app. Through my long-term project, I will be able to apply my knowledge of deep learning and Python programming to develop a feature that enhances the app's functionality and user experience.